



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,134	01/06/2004	Abbas A. Alahyari	10,665A	3921
30956	7590	06/08/2009	EXAMINER	
CARRIER CORPORATION			TAPOLCAI, WILLIAM E	
ONE CARRIER PLACE				
INTELLECTUAL PROPERTY DEPARTMENT			ART UNIT	PAPER NUMBER
FARMINGTON, CT 06034			3744	
			MAIL DATE	DELIVERY MODE
			06/08/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ABBAS A. ALAHYARI; MARY D. SAROKA

Appeal 2009-003035
Application 10/752,134
Technology Center 3700

Decided:¹ June 08, 2009

Before RICHARD E. SCHAFER, JAMESON LEE, and MICHAEL P. TIERNEY, *Administrative Patent Judges*.

TIERNEY, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

A. STATEMENT OF THE CASE

This is a decision on appeal by the real party in interest, Carrier Commercial Refrigeration Inc. under 35 U.S.C. § 134(a) from a final rejection of claims 1-4. Appellants request reversal of the Examiner's rejection of those claims. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

References Relied on by the Examiner

Roberts	5,357,767	Oct. 25, 1994
---------	-----------	---------------

The Rejections on Appeal

The Examiner rejected claims 1-4 under 35 U.S.C. § 102(b) as anticipated by Roberts. The Appellants argue the patentability of claim 1, collectively with claims 2-4.

The Invention

The invention relates to an open-front refrigerated display merchandiser having curtains of air passed downwardly across the open front where the curtains have differing velocities. (Spec., p. 1, ¶ 2). Claim 1, is illustrative of the claimed invention and is reproduced below:

1. A refrigerated merchandiser including a display case defining a product display region having an open-front viewing area, a first air outlet associated with said display case for directing a first air stream generally downwardly across the front viewing area along a first path, and a second air outlet associated with said display case for directing a second air stream generally downwardly across the front viewing area along a second path outwardly of the first air stream; said refrigerated merchandiser characterized in that the first air stream exits the first air outlet at a first discharge velocity and the second air stream exits the

second air outlet at a second discharge velocity, said second discharge velocity being at least 1.4 times greater than said first discharge velocity.

(Br. Claims App'x, p. 14).

B. ISSUE

Have Appellants' shown that the Examiner incorrectly determined that Roberts teaches a refrigerated merchandiser having a second discharge velocity that is at least 1.4 times greater than said first discharge velocity?

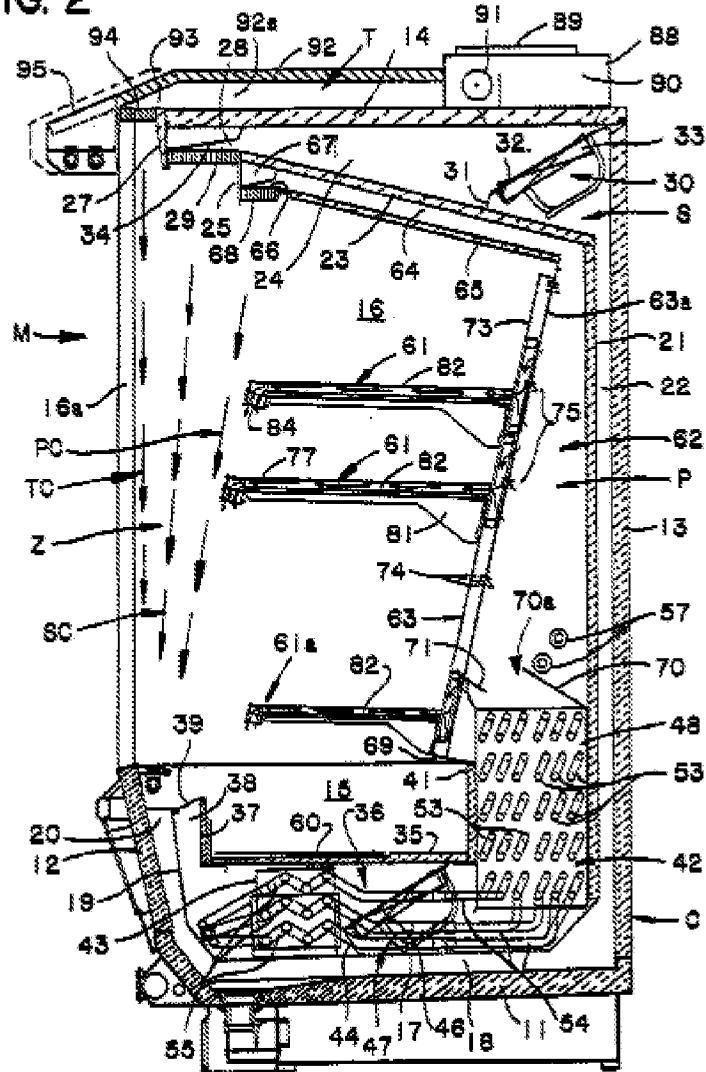
C. FINDINGS OF FACT

Roberts

1. Roberts teaches an open-front refrigerated merchandiser having a refrigerated primary curtain (PC), a secondary curtain (SC), and a tertiary curtain (TC). (Roberts, Abstract, Fig. 2, col. 9, l. 61 to col. 10, l. 16).
2. Roberts teaches that the PC is located at an innermost location relative to the front of the merchandiser, the SC is located closer to the front, and the TC is located closest to the front of the merchandiser. (Roberts, Fig. 2).
3. Roberts teaches that the air flows for the PC, SC, and TC flow through respective honeycombs 29, 68, and 94. (Roberts, col. 3, ll. 56-61, col. 7, ll. 13-23, and col. 8, ll. 55-59).

4. Roberts Figure 2 is reproduced below.

FIG. 2



Roberts Figure 2 depicted above shows the relative locations of the PC, SC, TC, and respective honeycombs 29, 68, and 94.

5. Roberts teaches that the PC has a velocity of about 200 fpm at the inner most area and a velocity of 250 fpm at the point where it meets the SC. (*Id.* at col. 9, ll. 61-65).

6. Roberts teaches that the SC (middle stream) has a velocity of about 250 fpm at the point where it meets the PC (inner stream) and a velocity of

300 fpm at the point where it meets the TC (outer stream). (*Id.* at col. 9, ll. 61-65).

7. Roberts teaches that the TC has a constant velocity of 300 fpm. (*Id.* at col. 10, ll. 11-13).

8. Roberts teaches that the relative velocities between the air streams are chosen to reduce intermixing and turbulence at the interfaces between the streams. (Col. 10, ll. 13-15).

9. Appellants' specification states that the relative velocities between the air streams are chosen to avoid shear instability (turbulence) between the respective air streams. (Spec., p.7, ¶ 017).

D. PRINCIPLES OF LAW

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

E. ANALYSIS

1. Anticipation

All of the claims stand or fall together with claim 1. The Examiner found that Roberts taught a refrigerated merchandiser having all of the limitations of claims 1-4. (Ans., pp. 2-4). Specifically, the Examiner found that Roberts discloses a discharge velocity for the second air stream (either the SC or TC) being 1.4 times greater than the discharge velocity of the first air stream (PC). (*Id.* at pp. 2-3). The Examiner also found that Roberts

taught the basic concept of Appellants' invention, an outer air curtain that has a greater discharge velocity than the inner air curtain. (*Id.* at p. 3).

Appellants dispute the Examiner's finding of unpatentability. Specifically, Appellants contend that Roberts teaches forming air curtains from a continuum of discrete air streams having different discharge velocities. (Br., p. 11). Further Appellants state that:

Roberts can not be read as proffered by the Examiner to teach one skilled in the art to pick at random a particular discharge velocity for an inner air curtain in the range of 200 to 250 fpm that would result in a discharge velocity for the tertiary air curtain at least about 1.4 times greater than the discharge velocity of the primary air curtain.

(*Id.*). Additionally, Appellants state that the Examiner's anticipation rejection lacked motivation and was based on improper hindsight. (*Id.* at pp. 11-12). Appellants' contentions are addressed below.

a. Claim Construction

i. Appellants' Claims Do Not Exclude Presence of Additional Discrete Air Streams

The claims utilize the transitional phrase "including," which does not limit the claim to only two air streams. *See, e.g., Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, (Fed. Cir. 2004) (transitional phrase "including" is synonymous with comprising and is open-ended and does not exclude additional, unrecited elements). Accordingly, we construe the claim as not limited to two specific air streams, i.e., other air streams may be present. Thus, Appellants' claims include two or more discrete air streams.

b. Roberts Teaches Discrete Air Streams that Yield the Claimed Ratio

As discussed above, Appellants acknowledge that “Roberts teaches forming each of the primary and secondary air curtains of a continuum of discrete air streams having different discharge velocities.” (Br., p. 11). Appellants further acknowledge that Roberts teaches a velocity of about 200 fpm at the inner most area of the PC and a velocity of 300 fpm at an outermost point of the SC, where it meets the TC. (*Id.* at p. 10).

As acknowledged by Appellants, Roberts teaches discrete air streams having velocities of 200 fpm and 300 fpm. Specifically, Roberts teaches an air stream at the innermost air curtain has a velocity of 200 fpm. Roberts teaches that an air stream at the outermost curtain has a velocity of 300 fpm. Thus, Robert’s teaches a velocity ratio of a first and second air stream of 1.5 (300/200).

2. Obviousness

Appellants’ brief states that Roberts would not have motivated one of ordinary skill in the art to use the claimed ratio of 1.4. (Br., p. 11). Appellants also contend that the Examiner’s rejection constitutes improper hindsight. (*Id.* at p. 12). Motivation and hindsight address concerns regarding obviousness determinations rather than anticipation. As the Examiner’s rejection is based on anticipation, Appellant’s arguments regarding motivation and hindsight do not demonstrate that the Examiner incorrectly determined that the claims were unpatentable over the prior art.

F. CONCLUSION

Appellants have not shown that the Examiner incorrectly determined that Roberts teaches a refrigerated merchandiser having a second discharge velocity that is at least 1.4 times greater than said first discharge velocity.

H. ORDER

The rejection of claims 1-4 under 35 U.S.C. § 102(b) as anticipated by Roberts is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

MAT

Carrier Corporation
One Carrier Place
Intellectual Property Department
Farmington CT 06034